Commonwealth of Kentucky
Division for Air Quality

PERMIT STATEMENT OF BASIS

DRAFT
Conditional Major, Construction / Operating
Permit: F-08-025
Heaven Hill Distilleries, Inc.
September 9, 2008
Esmail Hassanpour, Reviewer

SOURCE ID:	21-179-00005
AGENCY INTEREST:	3255
ACTIVITY:	APE20080002

SOURCE DESCRIPTION:

Heaven Hill Distilleries, Inc. applied to the Kentucky Division for Air Quality on June 11, 2008, to renew their permit in Bardstown, KY. The source currently holds operating permit (F-03-024R1) for their whiskey processing and bottling plant. The source is planning to construct a 7225 square foot tank room to house eight additional 14,000 gallon, stainless steel processing/bottling tanks. The facility proposes to replace the current barrel dumping system with a four station vacuum evacuation system with integrated water rinse. Also, the existing dump room tanks will be relocated and one additional dump room tank will be added.

At this facility, tankers of distillate are unloaded into cistern room storage tanks where the proof (alcohol content) of the liquid is adjusted using de-ionized water. The liquid is then placed in barrels and transported to warehouses for aging. The vacuum system which consists of automated barrel handling conveyors and four station vacuum evacuation unit will remove the aged whiskey from the barrel, via a wand, rinse the interior of the barrel with water; then remove the rinse water. The whiskey and rinse water are pumped to dump room tanks where the weight and proof of the product is gauged. The gauged volume of whiskey is then pumped to storage or processing tanks. Inside the processing area, the whiskey proof may be adjusted again before the product is filtered and pumped to bottling. Finally, the product is labeled and packaged for storage and shipping.

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive emissions is applicable to each affected facility which emits or may emit fugitive emissions and is not elsewhere subject to an opacity standard within the administrative regulations of the Division for Air Quality.

401 KAR 61:015, Existing indirect heat exchangers, applicable to an emissions unit with a capacity of less than 250 MMBtu/hr that commenced before April 9, 1972.

401 KAR 59:015, New indirect heat exchangers, applicable to an emissions unit with a capacity of less than 250 MMBtu/hr and commenced on or after April 9, 1972.

Regulation 7, Prevention and control of emissions of particulate matter from combustion of fuel in indirect heat exchangers.

NON APPLICABLE REGULATIONS

The regulation 40 CFR 60, Subpart Kb, does not apply to the new beverage alcohol storage tanks. Pursuant to 40 CFR 60.110b (d)(7), the beverage alcohol storage vessels are exempted.

SIGNIFICANT UNITS

Emissions Unit: 01 (05-1) Barrel Aging 1946-1983

Pursuant to 401 KAR 52:030, Section 26, the permittee shall monitor and maintain records of the number of aging barrels stored on a yearly basis.

Emissions Unit: 02 (06-1) Barrel Dumping 1994/2008

Pursuant to 401 KAR 52:030, Section 26, the permittee shall monitor and maintain record of the number of barrels of spirits evacuated with the vacuum system.

Emission Unit: 3 (07-01) 37 Outside Ethanol Storage Tanks 1968-2004

Pursuant to 401 KAR 52:030, Section 26, the permittee shall monitor and maintain records of the amount of spirits (in proof gallon unit) processed through the outside storage tanks on a monthly basis.

Emissions Unit: 04 (07-02) 56 Inside Bottling Tanks 1968-1996/2008

Pursuant to 401 KAR 52:030, Section 26, the permittee shall monitor and maintain records of the amount of spirits (in proof gallon unit) processed through inside storage tanks on a monthly basis.

Emissions Unit: 05 (08-01) Bottle Filling Lines 1975-2008

Pursuant to 401 KAR 52:030, Section 26, the permittee shall monitor and maintain records of the amount of spirits (in proof gallon unit) processed through the bottle filling lines on a monthly basis.

Emissions Unit: 06 (09-01) Equipment Leaks 1934-1997

Pursuant to 401 KAR 52:030, Section 26, the permittee shall monitor and maintain records of the hours of operation of the affected facilities associated with the equipment listed under this emission point on a yearly basis.

Emissions Unit: 07 (13-01) Bottling House Cooling Tower 1970

Pursuant to 401 KAR 52:030, Section 26, the permittee shall monitor and maintain records of the cooling water usage rate on a monthly basis.

Emissions Unit: 08(10-01&10-02) Natural Gas/Oil Fired Indirect Heat Exchangers/1964

Pursuant to 401 KAR 61:015, Section 4(1), and Regulation No. 7, particulate emissions from the unit shall not exceed 0.46 lb/MMBtu based on a three-hour average.

Pursuant to 401 KAR 61:015, Section 4(3), 4(4), and Regulation No. 7, emissions shall not exceed 40 percent opacity based on a six-minute average except:

(1) That, for cyclone or pulverized fired indirect heat exchangers, a maximum of 60 percent opacity shall be permissible for not more than one 6-minute period in any 60 consecutive minutes.

(2) For emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.

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Pursuant to 401 KAR 61:015, Section 5(1), sulfur dioxide emissions from the unit shall not exceed 4.59 lbs/MMBtu based on a twenty four-hour average.

Pursuant to 401 KAR 52:030, Section 26, the permittee shall perform a qualitative visual observation of the opacity of emissions on a weekly basis and maintain a log of the observations. If visible emissions from any stack are seen, then the opacity shall be determined by EPA Reference Method 9 and if the opacity reading is greater than 20 percent, then initiate an inspection of the equipment for any repair.

Pursuant to 401 KAR 52:030, Section 26, the permittee shall monitor and maintain records of the amount of fuel oil burned on a monthly basis.

Pursuant to 401 KAR 52:030, Section 26, the permittee shall obtain a fuel supplier certification of the sulfur content for all fuel oil burned.

Emissions Unit: 09 (10-3) Natural Gas Fired Indirect Heat Exchanger 1985

Pursuant to 401 KAR 59:015, Section 4(1)(c), particulate emissions from the unit shall not exceed 0.33 lbs/MMBtu.

Pursuant to 401 KAR 59:015 Section 4 (2), visible emissions shall not exceed twenty (20) percent opacity except:

(1) that a maximum of forty (40) percent opacity shall be permissible for not more than six (6) consecutive minutes in any sixty (60) consecutive minutes during cleaning of the fire box or blowing soot;

(2) for emissions during building a new fire for the period required to bring up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.

Pursuant to 401 KAR 59:015, Section 5(1)(c), sulfur dioxide emissions from the unit shall not exceed 1.21 lbs/MMBtu.

Pursuant to 401 KAR 52:030, Section 26, the permittee shall perform a qualitative visual observation of the opacity of emissions on a weekly basis and maintain a log of the observations. If visible emissions from any stack are seen, then the opacity shall be determined by EPA Reference Method 9 and if the opacity reading is greater than 20 percent, then initiate an inspection of the equipment for any repair.

Pursuant to 401 KAR 52:030, Section 26, the permittee shall monitor and maintain records of the amount of fuel oil burned on a monthly basis.

Pursuant to 401 KAR 52:030, Section 26, the permittee shall obtain a fuel supplier certification of the sulfur content for all fuel oil burned.

Emissions Unit: 10 **4 Outside Cistern Room Tanks** 2005

Pursuant to 401 KAR 52:030, Section 26, the permittee shall monitor and maintain records of the amount of spirits (in proof gallon unit) processed through outside storage tanks on a monthly basis.

Emissions Unit: 11 **3 Inside Cistern Room Tanks 2005**

Pursuant to 401 KAR 52:030, Section 26, the permittee shall monitor and maintain records of the amount of spirits (in proof gallon unit) processed through inside storage tanks on a monthly basis.

Emissions Unit: 12 **Mixing/Processing Tanks 1968-1996**

Pursuant to 401 KAR 52:030, Section 26, the permittee shall monitor and maintain records of the amount of spirits (in proof gallon unit) processed through inside storage tanks on a monthly basis.

EMISSION AND OPERATING CAPS DESCRIPTION:

1. In accordance with 401 KAR 52:030, Section 1, and to preclude the applicability of 401KAR 52:020, source wide emissions of sulfur dioxide (SO_2) and volatile organic compounds (VOC) shall not equal or exceed 90 tons on a twelve month rolling total.

2. Total #2 fuel oil burned in three indirect heat exchangers (emission units 8 and 9) shall not exceed 2.535 million gallons during any consecutive twelve months period.

3. Sulfur content of the #2 fuel oil burned shall not exceed 0.5 weight percent.

4. Spirits processed at each emission unit (03: outside storage tanks, 04: inside storage tanks, and 05: bottle filling lines) shall be limited to 71,372,869 proof gallons during any consecutive 12 months period, to preclude the applicability of 401 KAR 52:020.

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.